Claims

We claim:

- 1. A shock absorber for use in a disc reading device, including a rotation motor, the shock absorber comprising:
 - a damper for selectively restraining vibration of the rotation motor; and
 - a compression device for selectively compressing the damper;
 - wherein as the rotation motor is in a first state, the compression device doesn't compress the damper, and as the rotation motor is in a second state, the compression device compresses the damper.
- 2. The shock absorber according to claim 1, wherein the compression device further comprises a detection circuit and a compression mechanism, and the detection circuit detects state of the rotation motor and selectively controls the compression mechanism to compress the damper.
- 3. The shock absorber according to claim 1, wherein the first state and the second state respectively represent different rotation speed of the rotation motor.
- 4. The shock absorber according to claim 1, wherein the compression device compresses the damper to increase a natural frequency of the damper.
- 5. A method for preventing vibration of a disc reading device, including a rotation motor, a damper and a compression device, the method comprising:
 detecting state of the rotation motor; and

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EXPRESS MAIL NO. EL426699427US

the compression device not compressing the damper as the rotation motor is in a first state, and the compression device compressing the damper as the rotation motor is in a second state to restrain vibration caused by the rotation motor.

- 6. The method according to claim 5, wherein the compression device further comprises a detection circuit and a compression mechanism, and the detection circuit detects state of the rotation motor and selectively controls the compression mechanism to compress the damper.
- 7. The method for according to claim 5, wherein the first state and the second state respectively represent different rotation speed of the rotation motor.
- 8. The method according to claim 5, wherein the compression device compresses the damper to increase a natural frequency of the damper.

9

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